



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

(DS)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	P	ATTORNEY DOCKET NO.
08/825,492	03/28/97	HUGHES		

LM02/0731

BAKER, W EXAMINER

ART UNIT	PAPER NUMBER
273	

07/31/98 2

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/825,492	Applicant(s) Hughes et al.
	Examiner Baker, W. Todd	Group Art Unit 2731

Responsive to communication(s) filed on Mar 28, 1997

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- Claim(s) 1-20 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 1-20 is/are rejected.
- Claim(s) _____ is/are objected to.
- Claims _____ are subject to restriction or election requirement.

Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on Mar 28, 1997 is/are objected to by the Examiner.
- The proposed drawing correction, filed on _____ is approved disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All Some* None of the CERTIFIED copies of the priority documents have been
- received.
 - received in Application No. (Series Code/Serial Number) _____.
 - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2731

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show means for identifying partially filled ATM cells within an ATM cell stream and means for removing partially filled ATM cells from the ATM cell stream coupled to the means for identifying as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka. Tanaka discloses a cell multiplexing apparatus for merging partially filled ATM cells. In reference to claims 1-2, Tanaka specifically discloses a method wherein ATM cells are received from a source terminal (Col. 6, 15-16) and are merged into a multiplexed cell to which the representative VPI is appended and output (Col. 6, lines 31-41).

Art Unit: 2731

In regards to claim 3 and 4, Tanaka teaches that the multiplexed cell comprises header information which makes it possible to reconstruct the individual ATM cells at the receiving side (Col. 7, lines 17-44 and Fig. 7).

In regards to claim 5, Tanaka teaches a method wherein cell ordering is never lost and thus ordering is always maintained (See Col. 10, lines 48-59).

In regards to claims 6-8, Tanaka teaches that the cell multiplexing and demultiplexing can occur at an ATM exchange (switch) at the edge of a network or internal (See Fig. 9 and Col. 8, lines 14-46).

4. Claims 9-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kagemoto. Kagemoto discloses a multiplexer demultiplexer switching device. In regards to claims 9 and 12, Kagemoto specifically discloses: a Table, 32, for identifying partially filled ATM cells within an ATM cell stream (Fig. 1); a demultiplexer, 31, for removing a partially filled ATM cell from the ATM stream coupled to the Table (Fig. 1).

In regards to claim 10, Kagemoto discloses a multiplexed cell generator, 35, for merging at least two partially filled ATM cells into a merged ATM cell coupled to the demultiplexer (Fig. 1).

In regards to claim 11, Kagemoto discloses a multiplexer, 39, for inserting the merged ATM cell into the ATM cell stream coupled to the means for merging (Fig. 1).

In regards to claim 13, Kagemoto discloses a demultiplexer, 59, for splitting a merged ATM cell into two or more partially filled ATM cells (Fig. 6).

Art Unit: 2731

In regards to claims 14-16, Kagemoto discloses a network wherein a first node comprises a multiplexer for multiplexing cells and a second node contains a demultiplexer for demultiplexing cells (Fig. 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagemoto in view of Tanaka. In regards to claim 17 and 18, Kagemoto does not disclose a network wherein the merged ATM cell comprises header information indicative of the number of partially filled ATM cells contained within the merged cell. Tanaka teaches, however, a multiplexed cell which comprises header information which makes it possible to reconstruct the individual ATM cells at the receiving side (Col. 7, lines 17-44 and Fig. 7). Accordingly, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains, to format the multiplexed cell taught in Kagemoto to comprise header information which makes it possible to reconstruct the individual ATM cells at the receiving side. Formatting the cells in this manner removes the necessity of signaling information necessary to demultiplex the cells on the receiving side.

Art Unit: 2731

In regards to claims 19 and 20, Kagemoto teaches that the cell multiplexing/demultiplexing device can be employed in an ATM end-system or as a switching device (Fig. 2).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lagoutte discloses a method and device for asynchronous mode transmission putting microcells into use. Hiller et al. discloses a method for converting PCM signal streams into ATM cells for switching and transmission across a telecommunications network. Lastly, Takashima et al. discloses a cell multiplexing apparatus.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Art Unit: 2731

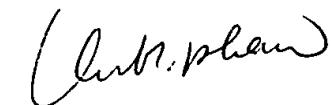
Any inquiry of a general nature relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Todd Baker whose telephone number is (703)-305-1111. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached at (703) 305-4378.

W. Todd Baker

July 27, 1998



CHI H. PHAM
SUPERVISORY PATENT EXAMINER
GROUP 2705

7/28/98